



Patent Application
JSF01-0068/WJT08-0044

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P. Brunsman

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Louise C. Sengupta et al.) Group No. 1755

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Serial No.: 09/768,690) Examiner: David M. Brunsman

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Filed: January 24, 2001)

For: **ELECTRONICALLY TUNABLE, LOW-LOSS CERAMIC MATERIALS
INCLUDING A TUNABLE DIELECTRIC PHASE AND MULTIPLE METAL
OXIDE PHASES**

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AMENDMENT

In response to the First Office Action dated June 24, 2003, please amend the above-identified patent application as follows:

In the Claims

Claim 1 has been amended and claims 9 and 12 have been cancelled. Claims 1 - 8, 10, 11 and 13 - 23 remain in the application. Claim 1 is the independent claim.

1. (Currently Amended) An electronically tunable dielectric material comprising at least one electronically tunable dielectric phase, wherein the at least one electronically tunable dielectric phase is selected from barium strontium titanate, barium titanate, strontium titanate, barium calcium titanate, barium calcium zirconium titanate, lead titanate, lead zirconium titanate, lead lanthanum zirconium titanate, lead niobate, lead tantalate, potassium strontium niobate, sodium barium niobate/potassium phosphate, potassium niobate, lithium niobate, lithium tantalate, lanthanum tantalate, barium calcium zirconium titanate, sodium nitrate, and combinations thereof, and a total of from about 1 to about 80 weight percent of at least two additional metal oxide phases, wherein the additional metal oxide phases comprise oxides of at least two metals selected from Be, Mg, Ca, Sr, Ba, Ra, Li, Na, K, Rb, Cs, Al, Zr, Zn, Fr, B, Fe, Mn, Cu, Cr, Ti, Ta, Nb, Mo, W, Ni, Pd, Pb, Bi, Si, Sn, Hf.